FOREST HEALTH PROTECTION
Pacific Southwest Region

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Forest Health issues in North Fork Mono Rancheria

Summary
On June 26, 2008 Forest Health Protection, South Sierra Shared Service Area was asked by Dr. Roselynn Lwenya to evaluate possible forest health issues on the North Fork Mono Rancheria (T 8 S, R 22 E, Section 24), elevation around 2000 ft. We walked through most of the 65 acre oak woodland that comprised the property. During the visit, we discussed potential insect and diseases present in oak woodlands and associated pines, management alternatives if opportunities should arise, and general future plans the tribal leadership is considering in the development of the site.

Observations/Discussion
South Sierra Shared Service Area, Forest Health Protection (Beverly M. Bulaon, entomologist; Martin MacKenzie, pathologist) was requested by Dr. Roslyn Lwelyn (Environmental Director for the North Fork Mono Rancheria) and accompanied by Gaylen Lee (Environmental committee member), to evaluate potential forest health issues pertaining to oak woodlands and associated pines that comprise the 65 acre property. Management plans for the Rancheria are to develop some of the land for housing, while leaving the majority in its natural conditions. Amongst the tribe there has been some discussion on the subject of developing plantings of culturally significant plants.

The Rancheria is located along the Willow Creek drainage, east of the town of North Fork. Approxiamately 80% of the land is considered oak woodland, dominanted by blue, interior live, and black oaks plus scattered individuals of gray pine, ponderosa pine, and Incense cedar. Poison oak, manzanita, and California buckeye comprise a majority of the understory vegetation, creating dense thickets throughout the property. Incense cedar seedlings were sprouting under some of the larger bushes, and oak recruitment was abundant under mature trees. There is no recorded history of any significant insect, disease, or drought-related tree mortality in the Rancheria. Gaylen informed us that recorded disturbances on the property have been direct results of human interventions. Past grazing management of cattle and goats created some open meadows and trails through the property. Evidence of past occupation of the site by the Mono people were found, such as stones that had been built around what once was a spring vent or intentional planting of some brush species.

There was little to no insect or disease activity observed during the visit in oaks or pines. Two large ponderosa pines (15 and 22 inches diameter-at-breast height) were successfully infested with western pine beetle. Gray pines were noted with low infection rates of dwarf mistletoe, and a small group of about 3 trees on a distant hillside were fading. Most of the

oaks in the property appeared healthy and vigorous. Leafy mistletoe was present in oak crowns, but did not appear to be affecting trees. If bark beetle activity does continue to occur in valued pines, funding opportunities with Forest Health Protection may be available for tree protection.

Young black oak saplings were in good health.

Old mulch piles were observed to be supporting germinated oak seedlings

The black oak is a culturally significant species to the Mono people. We observed young, healthy, black oak saplings and observed that last years acorn crop had established well on mulch piles. The question to be answered is, "Will these seedlings still be alive next year?" If so, we may have a relatively inexpensive way of establishing black oak.

The only possible issue for mature tree establishment and retention is resource competition with present brush conditions. Species such as white leaf manzanita and ceanothus can become "resource sinks" that pull most of the available water and nutrients away from less competitive vegetation. Historical low intensity fires were recorded to have occurred frequently in California oak woodlands, keeping brush densities minimal and promoting even resource distribution among trees. Land management activities that reduce competitive brush would be beneficial in preventing high intensity fires to occur, and provide more resource distribution, especially to desired oaks and pines.

Forest Health Protection was pleased to have the opportunity to meet with Roslyn and Gaylen. If you require any assistance in the future, or would like more information on items discussed during the field visit, please contact us.

/s/

Beverly M. Bulaon	Martin Mackenzie	Joel Egan
Entomologist	Pathologist	Entomologist